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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/610,490	06/30/2003	Sriram R. Vangal	80107.018US1	5404

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LeMoine Patent Services  
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P.O. Box 52050  
Minneapolis, MN 55402

EXAMINER

TRAN, MICHAEL THANH

ART UNIT	PAPER NUMBER
2818	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/610,490

Applicant(s)

VANGAL ET AL.

Examiner

Michael t Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on June 30, 2003 through October 20, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-25 is/are allowed.
- 6) ☒ Claim(s) 1, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0603.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. In response to the Communications dated June 30, 2003 through October 20, 2003, claims 1-25 are active in this application.

### ***Information Disclosure Statement***

2. The information disclosure statement filed October 20, 2003 has been considered.

### ***Claim Objections***

3. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections – 35 U.S.C. § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1, 7, and 8 are rejected under 35 U.S.C 102(b) as being anticipated by Kapral [U.S. Patent #4,468,653].

With respect to claim 1, Kapral discloses, in figure 1, a decoder circuit comprising: a plurality of output nodes [at S1-S5]; a charge sharing node [along S11-15]; a charge sharing enable generator [27] adapted to assert a charge sharing enable signal when an address changes [14]; and a plurality of switching devices [at S11-S15] coupled to be responsive to the charge sharing enable signal, wherein the plurality of switching devices are adapted to conditionally couple two of the plurality of output nodes to the charge sharing node concurrently.

With respect to claims 7 and 8, Kapral discloses that the plurality of switching devices comprise/consists PMOS transistors. See column 4, lines 45-68.

### ***Allowable Subject Matter***

6. Claims 9-25 are allowable over the prior art of record.

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter: the prior art of records does not show (in addition to the other elements in the claim) the following:

- ❖ A charge recycling control circuit coupled to receive the charge sharing enable signal and produce a control signal to control one of the plurality of switching devices.

- ❖ The charge sharing enable generator includes a programmable delay element to influence a width of the charge sharing enable signal.
- ❖ The charge sharing enable generator includes a fixed delay element to influence a width of the charge sharing enable signal.
- ❖ A first switching device responsive to the first charge recycling control circuit coupled between a charge sharing node and the first output node; and a second switching device responsive to the second charge recycling control circuit coupled between the charge sharing node and the second output node.
- ❖ A receiver adapted to receive communication signals; a charge sharing enable generator adapted to assert a charge sharing enable signal when an address changes; and a plurality of switching devices responsive to the charge sharing enable signal, wherein the plurality of switching devices are adapted to conditionally couple two of the plurality of outputs nodes to the charge sharing node concurrently.
- ❖ Generating a charge sharing enable signal when the address changes from the first address to a second address; and sharing charge between a first decoder output node corresponding to the first address and a second decoder output node corresponding to the second address.

### ***Conclusion***

8. When responding to the Office action, Applicants are advised to provide the Examiner with line and page numbers of the application and/or references cited

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to assist the Examiner in the prosecution of this case.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael T. Tran whose telephone number is (571) 272-1795. The Examiner can normally be reached on Monday-Thursday from 7:30-6:00 P.M.

10. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1650.



Michael T. Tran  
Art Unit 2818  
June 30, 2004